Work Orde <i>May-01-13 7:27</i>	er ID 100897	•.			*100	1897*						Pag	ge 1
Revision ID:	D2332-041 Lid Prop Assembly 6.6	69" long		A	ccept	*N900	040	100)*	Setup St		*NS1*	
	4/30/13 Start	Qty: 5.00 d Qty: 5.00		*5* *5*		Cust Item I Customer:	D:	·				NO.	
Approvals:	Process Plan: QC:		•	505-03	Tooling: SPC (Y/N):		ate:		. <i>.</i>		ton	*NR1 ³	
Sequence ID/ Work Center II	Opera D Descr			,	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty		eject Insp. umber Stamp) · ·
Draw Nbr	Revision N	br										-	·
D2332	Rev C1									~			•
*100 *100* Small Fab Small Fab	,		332-11 using 1/2	_	0.00 0.00 s per dwg D2332. 735" long.	*			5	Ø		- FF - 13-	05-00
110					0.00				,	~ `		EF	

110 Brake NC

Brake NC

Memo

0:00

Punch and form D2332-11 to length as per dwg D2332 using DT8012 (need 2 per ass'y)

											DQA:	Date	2:
NCR: Y	es /	No				WORK ORDER NON-	-COI	NFORM	/ANCE / UP	DATE	QA Closed:	Date	
											QA Closed:	Date	:
Nork Orde	rr:					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Part N				•		Rework Scrap		ľ	Skid-tube Machining	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR N	lo					Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Kec/Sto	re/Packaging Supplier	Other
Root			Char	0.		iption of work order update		Initial		tion	Sign &	Verification	OC Increases
Cause	- - ^U	ate	Step	Qty		or Non-conformance	- Cr	ief Eng	Desc	ription	Date	verification	QC Inspector
oc/Data quip/Tooling													
perator		*							Į			i I	
1aterial	_								į		}	:	
etup									1				
Other										•			
rocess		_											
upplier	_								ļ				
raining													•
napproved											<u> </u>		
	-						FAUL	T CATE	GORY				
Landir	ng Gear	•			_	General	_	,		_	-	_	_
	 !	ding			_	Bend		Grain		_	Ovalized		Pressure/Forced
	Cer	itre No	ot Conce	ntric to (o/s	BOM/Route	\perp	Hardwa		<u>_</u>	Over/Under	<u> </u>	Temperature/Cure
	Cra					Broken/Damaged	\perp	d '	on incomplete		Part Incorre	<u> </u>	Weld
•	_		Crimped		ļ	Burrs	_	4	ions Incomplete/	Unclear	Part Lost/Mi	issing	Wrong Stock Pulled
	Cut					Contamination	<u> </u>	Mainte	nance		Part Moved		
	_	at Trea				Countersink		Mislabe	led		Positioned V	_	_
	Ins	pection	n Strip in	Tube		Cut Too Short		Misread	I		Power Loss/	Surge	Other
į	Rip	ples in	Bend		L	Drill Holes	L	Offset					<u> </u>
	Tor	que W	aves in E	extrusion	ր [_	Drawing	Ŀ	Out of C	Calibration				
ĺ	Tur	ning S	equence			Finish	- 1	Out of S	eauence				

Outside Dimensions

Wave/Twist in Tube

Folio

Work Ord <i>May-01-13 7:2</i>		00897		*100	1897*						Page 2
Item ID: Revision ID:	D2332-041			Accept	*N900	040	100) *	Setup Start	ריעו	1*
Item Name:	Lid Prop Ass	embly 6.69" long		•					Stop	*NS	2*
Start Date: Required Date: Reference:	4/30/13 4/30/13	Start Qty: 5.00 Req'd Qty: 5.00	*5* *5*		Cust Item l Customer:	D:				·	
Approvals:	Process Pl	an:	Date:	Tooling:	D	ate:		I	Run Start	* *NR	1*
						ate:			Stop	*NR	2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	•	isp.
*120 *120* Small Fab		Memo		0.00				5	Ø	F.) 05-
Small Fab				D2332 using drill jig DT8	4459					•	
		2- Ensure ne	o forein objects inside tub	e							
		3- Deburr		<	27						
130 *130*		QC5- Inspect part comp	eteness to step on W/O	0.00	58			5			
QC Quality Control		Memo		0.00							

140

140 Large Fab

Large Fab

0.00

0.00

Weld D2332-11 and D2332-5 as per dwg (weld 1 per ass'y)
******ensure nothing is inside of tube before welding********

S.S Rod batch: MA353

Memo

(3) 13:05:04 (9)

NCR:	Yes	/ No				WORK ORDER NON	-CO	NFORM	MANCE / UP	DATE			
											QA Close	d: Date	2:
Work Ord	ler.					DISPOSITION				AGAINST D	EPARTMEN	T/PROCESS	
Part NCR	No.					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	Rec/St	Water Jet od. Eng. Coor. ore/Packaging Supplier	Engineering Quality Other
Root			1		Descri	ption of work order update	T	Initial	Ac	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance		nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data	T												
Equip/Tooling	, -			}									
Operator		1											
Material													
Setup							İ				ļ		
Other				1 1		•							
Process		1											
Supplier			1	<u> </u>									
Training		1											
Unapproved													
							FAU	LT CATE	GORY				
Land	ling (Gear				General		_		_	_	_	_
		Bending				Bend	L	Grain			Ovalized		Pressure/Forced
		Centre N	ot Conce	ntric to (o/s	BOM/Route		Hardwa	re		Over/Und	er tolerance	Temperature/Cure
		Cracks			L	Broken/Damaged	L	Inspecti	ion Incomplete	L	Part Incori	ect	Weld
	L	Crushed	/Crimped			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/I	Missing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	enance		Part Move	d	
		Heat Tre	at			Countersink	L	Mislabe	eled		Positioned	Wrong	
		Inspection	on Strip in	Tube		Cut Too Short		Misread	i		Power Los	s/Surge	Other
	8	Ripples i	n Bend			Drill Holes		Offset					
	1. 1	Torque V	Vaves in I	Extrusion	ı 🗀	Drawing	,	Out of 0	Calibration				

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

Work Order I <i>May-01-13 7:27:27</i>		·	*100	1897*		· .	Page 3	
Revision ID: Item Name: Lid	Prop Assembly 6.69" long 0/13	*5* *5*	Accept	*N9000401 Cust Item ID: Customer:	I	Setup Sta	14.21	¥
Reference: Approvals: Pr	ocess Plan:	Date:	Tooling: _ SPC (Y/N):	Date:		Run Sta	"NR1"	
Sequence ID/ Work Center ID 150 *150* QC Quality Control	Operation Description QC9- Inspect visual per QS Memo	1004- Fusion Welds	Set Up/ Run Hours 0.00		Plan Acce Code Qty	Qty	Reject Insp. Number Stamp	
*160 *160* QC Quality Control	QC5- Inspect part complete Memo	eness to step on W/O	0.00 PC13.	5.9 (DAS) 24 28	<u>5</u> ×		·	
170 Small Fab Small Fab	Memo 1- Tumble	anna dua D2222	0.00		<u>5</u>		\$ 13.5:16 Ss 13/0	5/1

2- Assemble as per dwg D2332

NCR: Yes	/ No
----------	------

DQA:

Date: _

NCR: Y	es / No				WORK ORDER NON-C	CON	FORI	MANCE / UP	PDATE	QA Closed:	Da	to:	
					I							te.	
Work Orde	er:				DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS		
					Rework	1		Skid-tube	Crosstube		Water Jet	Engineerir	ng 🗌
Part N	lo.				Scrap	1	1	Machining	Small Fab	Pro	d. Eng. Coor.	Qualit	ty
					Use-as-is] [Thern	noforming	Finishing	Rec/Sto	re/Packaging	Othe	er 🗌 📗
NCR N	lo				Work Order Update]		Large Fab	Composite		Supplier		
Root				Descri	I ption of work order update	In	itial	Ad	ction	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chie	ef Eng	Desc	cription	Date	Verification	n QC Inspe	ector
Doc/Data						Ì							
Equip/Tooling													
Operator													
Material						1						1	
Setup								1					
Other													
Process		1											
Supplier													
Training													
Unapproved		<u> </u>						<u> </u>					
					F.	AULT	CATE	GORY					
Landi	ng Gear				General	_							
	Bending				Bend		Grain			Ovalized		Pressure/For	
	Centre N	ot Conce	ntric to (o/s	BOM/Route	Ш۲	lardwa	ire	ļ	Over/Under	tolerance	Temperature	/Cure
	Cracks				Broken/Damaged		nspect	ion Incomplete		Part Incorre	ct	Weld	
	Crushed/	Crimped			Burrs	<u></u>	nstruct	ions Incomplete	/Unclear	Part Lost/Mi	ssing	Wrong Stock	Pulled
	Cuffs			•	Contamination	Ши	Mainte	enance		Part Moved			
	Heat Trea	at			Countersink		∕Iislabe	eled	<u> </u>	Positioned V	Vrong		
	Inspectio	n Strip in	Tube		Cut Too Short		∕lisread	d		Power Loss/	Surge	Other	
	Ripples ir	n Bend			Drill Holes		Offset						
	Torque V	Vaves in E	xtrusio	ո [Drawing		Out of 0	Calibration					
	Turning S	equence			Finish		Out of S	Sequence					
	Wave/Tw	vist in Tul	ре		Folio		Dutside	Dimensions					

Work Ord	er ID	100897		*400	897*			TT.TE.E		Page 4
May-01-13 7:2				1 ()()	1097 					
Item ID: Revision ID:	D2332-0	041		Accept	*N900040	100*	Setup		*NS	1*
Item Name:	Lid Prop	Assembly 6.69" long						Stop	*NS	2*
Start Date: Required Date: Reference:	4/30/13 : 4/30/13	2.5	*5* *5*		Cust Item ID: Customer:					! •
Approvals:	Proces	ss Plan:	Date:	Tooling:	Date:			Start Stop	*NR	1*
	QC:_		Date:	_ SPC (Y/N):	Date:			осор	*NR	2*
Sequence ID/ Work Center I	D	Operation Description QC5- Inspect part compl		Set Up/ Run Hours	Tool ID Tool #	Plan Acce Code Qty	ept Reje ——Qty		•	nsp. tamp
*180 *180* QC Quality Control		Memo	eteriess to step on w/O	0.00	≥\ 	5(5	×		13	\$P ,_5-
190		ldentify as per dwg & St	ock Location:	55 0.00 ;						
100 Packaging Packaging		Memo		0.00						— B
					•					

200

QC21- Final Inspection - Work Order Release

0.00

200

Memo

0.00

Quality Control

							,		DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-	CON	FORM	MANCE / UPDATE	QA Closed:	Date:	
Work Orde					DISPOSITION	T		AGAINST	DEPARTMENT		:
Part N NCR N	0				Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Crosstube Machining Small Fab noforming Finishing Large Fab Composite	Pro Rec/Sto	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					ption of work order update	1	itial	Action	Sign &		
Cause	Date	Step	Qty	•	or Non-conformance	Chie	ef Eng	Description	Date	Verification	QC Inspector
oc/Data quip/Tooling Operator Material Setup Other Process Supplier Training Unapproved											
						AULT	CATE	GORY	· · · · · · · · · · · · · · · · · · ·		
Landin	-				General	`—-				_	1
	Bending Centre N Cracks Crushed/ Cuffs Heat Tre Inspection Ripples in	/Crimped at on Strip in n Bend	ı Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes	H II	nstruct Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/Unclear nance led	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned N Power Loss/	ct sissing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Torque V	Vaves in I	Extrusio	n	Drawing		Out of C	Calibration	•		

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Finish

Folio

·Picklist Print

May-01-13 7:27:26 AM

Work Order ID:

100897

Parent Item:

D2332-041

Parent Item Name:

Lid Prop Assembly 6.69" long

Start Date: 4/30/13

Required Date: 4/30/13

Start Qty: 5.00

Required Qty: 5.00

Comments:

IPP: B02.08.12Re-format; Incorporated D2332-13/-11/-7/-5KJ/RF

IPP Rev:C 08-06-02 add comment DD verified by:EC

	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R.250 304 SS Round bar .250		Purchased	No			100	f	64.4971	0.1	0.526316	F	E 13	<u>-05</u> -
				Location		Loc Qty	<u>L</u>	oc Code					
				MAT028		64.4971							
	•			1144	82 .	5.1							
.}				1202		15.6838			·				
				1226	82	43.7133			0.	5263			
M304TR1.000W.049 804 RD Tube 1.00 x .049W		Purchased	No		•	100	f	116.7205	0.43	2.263158	F	F 13	-05·
				Location	•	Loc Qty	L	oc Code					
				MAT018		116.72053		•					
				1175	98	0.00003							
				1206	54	18.5309							
				1252	<u>50</u>	98.1896			2.	2 63i			
M304TR0.500W.035		Purchased	No			110	f	335.4143	1.25	6.5789475		- , -	05
304 RD Tube .500 x .035W						1.5·				y		F 13	-05-
				Location MAT017	8702 (42	$\begin{cases} \frac{L_{\text{loc Oty}}}{335.41433} \end{cases}$	L	oc Code					
				1206	33	70.1979							
				1218	48 (6 0)	29.92344			6.	5789			
				1233		187.1315							
				1234	49	48.16149							. /
AN4-4A Bolt		Purchased	No			170	Each	73.0000	1	5		BB	105/1
				Location		Loc Oty	L	oc Code					•
				FP001		16							
				1146	15	6							
				1201		10							
•				ST355		57				_			
				1239	100	57							

7**5** 7

											DQA.	Date.	
NCR:	Yes	/ No				WORK ORDER NON-C	CON	IFOR1	MANCE / UP	DATE	QA Closed:	Date:	
Work Ord	er:					DISPOSITION				AGAINST D	EPARTMENT		
Part I	٠ No.					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root			Ţ		Descri	ption of work order update	lr	nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Chi	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data										,			
Equip/Tooling													
Operator													
Material													
Setup									· :				
Other		-	•										
Process	П		1		ļ					•			
Supplier			1		<u> </u>								
Training		[`											
Unapproved													
						F,	AUL	T CATE	GORY				
Landi	ng (Gear ~	•			General							_
Bending Bend						Bend	Grain				Ovalized		Pressure/Forced
Centre Not Concentric to O/S BOM/Route Ha						Hardwa	re		Over/Under	tolerance	Temperature/Cure		
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread Offset Wrong Stock Pulled

Other

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

May-01-13 7:27:27 AM

Way-01-13 7.27.2	/ AIVI				•					·
Work Order ID:	100897								THE REAL PROPERTY CONTRACTOR IN THE PERTY CONTRACTOR I	
Parent Item:	D2332-041						Start	Date: 4/30/13	Red	quired Date: 4/30/13
Parent Item Name:	Lid Prop Assembly	6.69" long	.•				Start	Qty: 5.00	Re	equired Qty: 5.00
AN960JD416L Washer	NAS1149D0416J	Purchased	No		170	Each	6.0000	3	15	SB Idos 13
			Locat	tion	Loc Qty	-	Loc Code	4 - 1		'
			FP00	110153	6		123741	· · · <u> </u>		
MS21042L4 Nut		Purchased	No		170	Each	683.0000	1	5	50 (3/05/17
			Locat	tion	Loc Oty		Loc Code			
			FP00	1	182					
				122452	170					
		,		8182	12					
			ST51	8	501					
				124231	501					
			•	M 12553	5				5	•

										DQA:	Date	:
NCR: Y	es / No				WORK ORDER NON-CONFORMANCE / UPDATE						Date	:
Work Order:		DISPOSITION		QA Closed: Date: AGAINST DEPARTMENT/PROCESS								
Work Order:			Rework	1 		Skid-tube Crosstub	و آ	1	Water Jet	Engineering		
Part No.			Scrap	⊢ •		Machining Small Fa	-	Prod. Eng. Coor.		Quality		
NCR No.				Use-as-is Work Order Update			~ —	Rec/Store/Packaging Supplier		Other		
Root				Descri	ption of work order update	Ī	nitial	Action		Sign &		
Cause	Date	Step	Qty	c	or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												•
Setup												
Other												
Process								,				
Supplier												
Training												
Unapproved						上						<u> </u>
					F	AUL	T CATE	GORY				
Landi	ng Gear				General		1			7	_	¬
	Bending				Bend		Grain			Ovalized		Pressure/Forced
	Centre Not Concentric to O/S BOM/			BOM/Route	Ш	Hardwa	re		Over/Under	-	Temperature/Cure	
Cracks			Broken/Damaged	Ш	Inspection Incomplete			Part Incorred	├ ─	Weld		
	Crushed/	Crimped		L	Burrs	Instructions Incomplete/Unclea		<u>-</u>	_	Part Lost/Mi	ssing	Wrong Stock Pulled
Cuffs			Contamination		Maintenance			Part Moved				
	Heat Treat				Countersink		Mislabeled			Positioned V	/rong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes Drawing

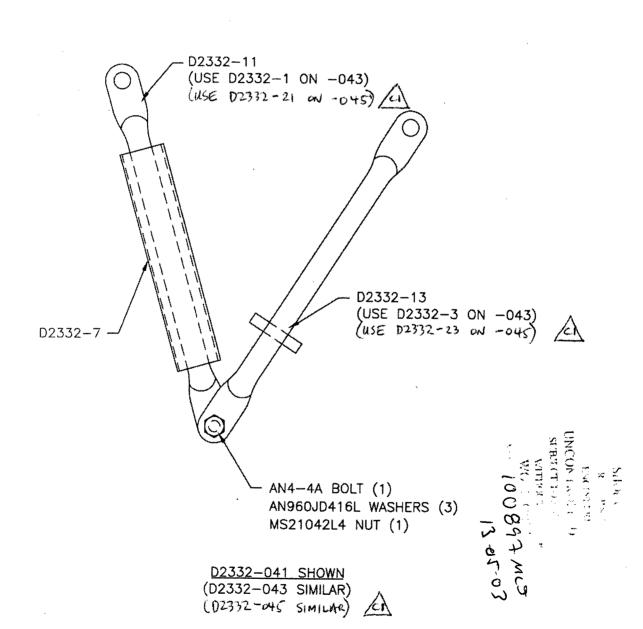
Finish Folio





				·							
13	DESIG	#	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA							
	CHEC	KED	APPROVED	DRAWING NO. REV. C							
		91	#	D2332 SHEET 1 OF 2							
	DATE			TITLE SCALE							
	03.0	07.03		LOD PROP ASSEMBLY NTS							
	Α		94.12.16	NEW ISSUE							
	В		97.09.30	CHANGE 416 WASHERS TO 416L							

MAKE -041 PROP 6.69" LONG (STD) MAKE -043 PROP 8.00" LONG (OPT.) C 03.07.03 03 08.06 ADD -045 PROP (7.25" LONG



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